IN THE CLAIMS:

1. (Currently Amended) A method of enhancing the intrinsic enzymatic activity of an enzyme to a substrate susceptible to said enzyme in a raw enzyme solution, said method comprising:

(a) diluting one part of said raw enzyme solution with at least two parts of an aqueous solution ~~selected from the group consisting of water and an aqueous buffer solution~~ to a provide a diluted, raw enzyme solution; ~~and~~

(b) treating said diluted raw enzyme solution with an effective amount of a ~~purifying agent~~ activated carbon for a sufficient period of time, at an effective raw enzyme weight to ~~purifying agent~~ activated carbon weight ratio of not greater than 50:1 to effect said enhancement; and

(c) removing the activated carbon to provide an enzyme solution of enhanced activity.

2. (Currently Amended) A method as defined in claim 1 wherein said ~~purifying agent is activated carbon~~ aqueous solution comprises an aqueous buffer solution.

3. (Currently Amended) A method as defined in claim 1 wherein said aqueous solution comprises water ~~further comprising removing said purifying agent from said enzyme solution of enhanced activity to provide a purified enzyme solution~~.

4. (Currently Amended) A method as defined in claim 1 comprising passing said raw enzyme solution through a column containing an effective amount of said activated carbon ~~purifying agent~~.

5. (Currently Amended) A method as defined in claim 1 ~~3~~ wherein said activated carbon ~~purifying agent~~ is removed by a method selected from the group consisting of filtration and centrifugation.

6. (Original) A method as defined in claim 1 wherein said raw enzyme solution is diluted with water to provide a diluted raw enzyme solution.

7. (Original) A method as defined in claim 1 wherein said raw enzyme solution is diluted with an aqueous buffer solution to provide a buffered diluted raw enzyme solution.

8. (Cancelled)

9. (Previously Presented) A method as claimed in claim 1 wherein said ratio is not greater than 15.

10. (Original) A method as defined in claim 1 wherein said enzyme is selected from the group consisting of amylase, glucoamylase, cellulase, xylanase, and all other group 3 hydrolases.

11. (Original) A method as defined in claim 1 wherein said enzyme solution of enhanced activity has a spectrum selected from Far UV (CD) and UV visible spectra distinct from said raw enzyme solution.

12. (Original) A method as defined in claim 11 wherein said enzyme solution of enhanced activity shows a relative absorbance intensity lower than said raw enzyme solution, in the CD spectral range of 205-230nm.

13. (Original) A method as defined in claim 11 wherein said enzyme is alpha-amylase and said enzyme solution of enhanced activity has a Far UV (CD) spectrum minimum ellipticity shifted by at least 1nm, from the raw enzyme solution, in the range between 205-230 nm.

14. (Original) A method as defined in claim 1 wherein said enzyme solution of enhanced activity has a UV-visible spectrum maximum peak at least 30 nm lower than said raw enzyme solution.

15. (Original) A method as defined in claim 1 wherein said enzyme is alpha-amylase and said enzyme solution of enhanced activity has a maximum spectral absorption peak over the range 340 to 360 nm.

16. (Original) A method as defined in claim 15 wherein said substrate is starch and said enzyme is alpha-amylase.

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) An enzyme solution of enhanced activity when made by a method comprising (a) diluting one part of ~~said~~ a raw enzyme solution with at least two parts of an aqueous solution ~~selected from the group consisting of water and an aqueous buffer solution~~ to a provide a diluted, raw enzyme solution, ~~and~~ (b) treating said diluted raw enzyme solution with an effective amount of ~~a purifying agent~~ activated carbon for a sufficient period of time, at an effective raw enzyme weight to ~~purifying agent~~ activated carbon weight ratio of not greater than 50:1 to effect said enhancement, and (c) removing the activated carbon to ~~and~~ provide an enzyme solution of enhanced activity.

20. (Currently Amended) A method of treating a substrate susceptible to enzymatic reaction with an enzyme, said method comprising treating said substrate with an enzyme Solution of enhanced activity made by a method comprising (a) diluting one part of ~~said~~ a raw enzyme solution with at least two parts of an aqueous solution ~~selected from the group consisting of water and an aqueous buffer solution~~ to a provide a diluted, raw enzyme solution, ~~and~~ (b) treating said diluted raw enzyme solution with an effective amount of ~~a purifying agent~~ activated carbon for a sufficient period of time, at an effective raw enzyme weight to ~~purifying agent~~ activated carbon weight ratio of not greater than 50:1 to effect said enhancement, and (c) removing the activated carbon to provide an enzyme solution of enhanced activity.

21. (New) A method of enhancing the enzymatic activity of an enzyme solution formed from fermentation comprising:

(a) diluting a fermentation broth containing an enzyme with an aqueous solution by a factor of at least three to provide a diluted enzyme solution;

(b) if the fermentation broth contains cells, filtering the diluted enzyme solution to remove the cells;

(c) treating the diluted enzyme solution with activated carbon at an effective raw enzyme weight to activated carbon ~~purifying agent~~ weight ratio of not greater than 50:1 and for a sufficient period of time to effect said enhancement; and

(d) removing the activated carbon to provide an enzyme solution of enhanced activity.

22. (New) The method according to claim 21, wherein the weight ratio of enzyme to activated carbon is not greater than 25:1.

23. (New) The method according to claim 21, wherein the weight ratio of enzyme to activated carbon is not greater than 15:1.

24. (New) The method according to claim 21, wherein the diluted enzyme solution exhibits at least the same level of enzyme activity per equal volume of the undiluted enzyme solution.

25. (New) The method according to claim 21, wherein the activity of the enzyme solution is enhanced by at least 200%.

26. (New) The method according to claim 21, wherein the fermentation broth is diluted with the aqueous solution by a factor of about 5:1 to 10:1 times.

27. (New) The method according to claim 21, wherein the aqueous solution comprises an aqueous buffer.

28. (New) The method according to claim 21, wherein the aqueous solution comprises water.

29. (New) The method according to claim 21, wherein the aqueous solution is selected such that the resulting pH of the diluted enzyme solution maintains enzyme activity.

30. (New) The method according to claim 21, wherein said enzyme solution of enhanced activity has a spectrum selected from Far UV (CD) and UV visible spectra distinct from said raw enzyme solution

31. (New) A method of enhancing the intrinsic enzymatic activity of a group 3 hydrolase solution formed from fermentation comprising:

(a) diluting an enzyme solution comprising at least one group 3 hydrolase with at an aqueous solution by a factor of at least three to provide a diluted enzyme solution;

(b) if the enzyme solution contains cells, filtering the diluted enzyme solution to remove the cells;

(c) treating the diluted enzyme solution with activated carbon at an effective raw enzyme weight to activated carbon weight ratio of not greater than 50:1 and for a sufficient period of time to effect said enhancement; and

(d) removing the activated carbon to provide an enzyme solution of enhanced activity.

32. (New) The method according to claim 31, wherein the weight ratio of enzyme to activated carbon is not greater than 25:1.

33. (New) The method according to claim 31, wherein the weight ratio of enzyme to activated carbon is not greater than 15:1.

34. (New) The method according to claim 31, wherein the diluted enzyme solution exhibits at least the same level of enzyme activity per equal volume of the undiluted enzyme solution.

35. (New) The method according to claim 31, wherein the activity of the enzyme solution is enhanced by at least 200%.

36. (New) The method according to claim 31, wherein the enzyme solution is diluted with the aqueous solution by a factor of about 5:1 to 10:1 times.

37. (New) The method according to claim 31, wherein the group 3 hydrolase is amylase.

38. (New) The method according to claim 31, wherein the group 3 hydrolase is glucoamylase.

39. (New) The method according to claim 31, wherein the aqueous solution comprises an aqueous buffer.

40. (New) The method according to claim 31, wherein the aqueous solution comprises water.

41. (New) The method according to claim 31, wherein the aqueous solution is selected such that the resulting pH of the diluted enzyme solution maintains enzyme activity.

42. (New) An enzyme solution having enhanced activity comprising at least one group 3 hydrolase made by a method comprising:

(a) diluting an enzyme solution comprising at least one group 3 hydrolase with at an aqueous solution by a factor of at least three to provide a diluted enzyme solution;

(b) if the enzyme solution contains cells, filtering the diluted enzyme solution to remove the cells;

(c) treating the diluted enzyme solution with activated carbon at an effective raw enzyme weight to activated carbon weight ratio of not greater than 50:1 and for a sufficient period of time to effect said enhancement; and

(d) removing the activated carbon to provide an enzyme solution of enhanced activity.